



Published in final edited form as:

*J Psychosoc Oncol*. 2017 ; 35(2): 180–201. doi:10.1080/07347332.2016.1276503.

## Managing cancer and employment: Decisions and strategies used by breast cancer survivors employed in low-wage jobs

Jennifer E. Swanberg, PhD<sup>a</sup>, Helen M. Nichols, MSW<sup>a</sup>, Jungyai Ko, PhD<sup>b</sup>, J. Kathleen Tracy, PhD<sup>c</sup>, and Robin C. Vanderpool, DrPH<sup>d</sup>

<sup>a</sup>School of Social Work, University of Maryland, Baltimore, MD, USA

<sup>b</sup>Department of Social Work, Hallym University, Chuncheon, Gangwon-do, South Korea

<sup>c</sup>Department of Epidemiology and Public Health, University of Maryland, Baltimore, MD, USA

<sup>d</sup>Department of Health, Behavior and Society, University of Kentucky, Lexington, KY, USA

### Abstract

Advances in breast cancer screening and treatment have led to an overall 5-year survival rate of 90%. Many of these cancer cases are diagnosed in working women. Few studies have explicitly examined the cancer–work interface, as experienced by low-wage earning women with breast cancer. This study uses in-depth, semistructured interviews with 24 low-wage breast cancer survivors to identify employment decisions and factors that influenced or enabled these decisions, and examine the individual strategies and workplace supports used to manage the cancer–work interface among a subset of women ( $n = 13$ ) who continued to work. Future research areas and clinical implications are discussed.

### Keywords

breast neoplasms; cancer survivorship; cancer–work interface; employment; qualitative research; workplace supports

### Introduction

Breast cancer is the most commonly diagnosed cancer among women in the United States (US), with more than 249,000 new cases expected in 2016 (American Cancer Society [ACS], 2016). Advances in breast cancer screening and treatment have led to an overall 5-year survival rate of 90% (DeSantis et al., 2014). Many women are employed when they are diagnosed with breast cancer, with almost 60% of cases diagnosed in working-age women between the ages of 20 and 69 (DeSantis et al., 2014). Working women diagnosed with breast cancer must make important treatment- and employment-related decisions concurrently throughout the course of their cancer care. We refer to this phenomenon as the cancer–work interface. For example, employed breast cancer survivors may decide to return to work<sup>1</sup> following treatment (Balak, Roelen, Koopmans Ten Berge, & Groothoff, 2008),

whereas other survivors frequently decide to work *during* treatment (Sandberg, Strom, & Arcury, 2014), though specific population estimates are unknown. Although these decisions are likely challenging for all working breast cancer patients, they may be especially burdensome for women employed in low-wage<sup>2</sup> hourly jobs, many of whom are likely to experience job insecurity (Roberts, Povich, & Mather, 2013), live from paycheck-to-paycheck (Williams & Boushey, 2010), and may have limited, if any, access to workplace policies and practices (e.g., paid leave, flexible work hours) that might otherwise help them manage the cancer–work interface (Farrell & Venator, 2012; Watson & Swanberg, 2013). For instance, an oncologist may recommend that a woman take time off from work during her chemotherapy treatment. However, low-wage earning survivors may not be able to afford to take time off without pay; a reduced paycheck may impact the ability to cover living expenses such as rent, medical bills, or groceries. As such, she may manage the cancer–work interface differently compared to a woman with access to more than a few days of paid leave. Likewise, being able to work flexibly (e.g., work from home, modify number of work hours/day or work schedule) has been shown to influence cancer survivors' decisions to continue to work during treatment (Pryce, Munir, & Haslam, 2007), however, many low-wage jobs are place based (i.e., job tasks must be done at worksite) and/or time bound (i.e., fixed work hours), limiting this strategy for low-wage earning survivors co-managing cancer treatment and work responsibilities.

Understanding the cancer–work interface—as experienced by low-wage women with breast cancer—is critical due to the significant growth in the number of low-wage jobs in the US within the past decade and the fact that women disproportionately hold these jobs (National Women's Law Center [NWLC], 2014). Indeed, there are currently 13 million women working in low-wage jobs in the US, comprising 65% of the low-wage workforce (NWLC, 2014). In contrast to those who are employed in higher-wage occupations, low-wage workers typically do not have access to employer benefits (Bureau of Labor Statistics [BLS], 2015a) that have been found to aid employed cancer survivors such as: employer-sponsored health insurance (Hsai et al., 2000), paid leave (Mehnert, 2011; Peipins, Soman, Berkowitz, & White, 2012), and flexible work hours (Pryce et al., 2007). Among low-wage workers, approximately 33% are offered healthcare benefits through their employer, only 25% have access to paid sick leave, and 5% have access to paid family leave (BLS, 2015b). Furthermore, low-wage jobs frequently require nonstandard work hours, namely, a schedule other than Monday–Friday, 8 am–5 pm (Enchautegui, 2013; Henly, Shaefer, & Waxman, 2006; Kalleberg, Reskin, & Hudson, 2000). These jobs also have unpredictable schedules over which employees have little control (Hammer, Kossek, Anger, Bodner, & Zimmerman, 2011; Swanberg, McKechnie, Ojha, & James, 2011), and have limited access to formal flexible work arrangements (Swanberg, Watson, & Eastman, 2014). Moreover, front-line

<sup>1</sup>The National Library of Medicine (2016) defines “return to work” as “the resumption of normal work routine following a hiatus or period of absence due to injury, disability, or other reasons.”

<sup>2</sup>Although there is no universal definition of “low-wage,” three general approaches have been adopted by researchers, policy advocates, and policymakers. The basic income approach estimates the income required to buy a minimal bundle of goods and services needed for daily living; the US poverty threshold is most commonly used (Boushey, Fremstad, Gregg, & Waller, 2007). The social inclusion approach defines low-wage as a wage equal to or less than two-thirds the median wage of men (Boushey et al., 2007). The third approach, based on the Living Wage Movement in the US, defines low-wage as less than \$15/hour (Fight for \$15, 2016; Tung, Son, & Lathrup, 2015), which is comparable to 125% of the US poverty line for a family of four in 2016 (United States Department of Health and Human Services [US DHHS], 2016).

supervisors seldom receive adequate training in work–life management skills (Kelly et al., 2014; Swanberg, James, Werner, & McKechnie, 2008) needed to effectively handle employees' issues surrounding cancer and work. These employment conditions inherent in low-wage jobs make it difficult for healthy individuals to thrive economically and emotionally (Hsueh & Yoshikawa, 2007; Lambert, Haley-Locke, & Henley, 2012; Williams & Boushey, 2010) and may be even more burdensome for a woman diagnosed with breast cancer.

In addition to employment conditions, there are also numerous medical factors, including stage at diagnosis, comorbidities, treatment type, time since treatment, and side effects, that may influence survivors' decisions and strategies related to managing cancer treatment with job responsibilities (Feuerstein, 2009; Feuerstein et al., 2010). Specifically, the presence and severity of treatment-related side effects may influence whether to keep working, take time off from work, or leave the labor force entirely (Ahles et al., 2008; Main, Nowels, Cavender, Etschmaier, & Steiner, 2005; Stewart, Bieljaw, Collins, Parkinson, & Tomiak, 2006).

Research on the cancer–work interface—specifically, understanding the decisions and strategies employed survivors use to co-manage their cancer and work responsibilities from diagnosis into treatment and survivorship—among breast cancer survivors who hold low-wage jobs is scant (Vanderpool, Swanberg, & Chambers, 2013), creating a gap in the literature. Furthermore, much of the research on breast cancer and employment has focused on *return to work*<sup>3</sup> as a primary employment outcome without drawing any distinction between those survivors who continue to work during some or all of their cancer treatment and those who take an extended leave, returning to work post-treatment (Feuerstein et al., 2010; Nitkin, Parkinson, & Schulz, 2011). In fact, minimal attention has been devoted in the literature to survivors who *continue working* during treatment (Sandberg et al., 2014), including reasons why they continue to work and strategies used to manage breast cancer treatment alongside work responsibilities.

We expect that cancer survivors employed in low-wage jobs may have a heightened need to continue to work during their cancer treatment and recovery due to the economic and employment precariousness of their situations. Examination of the cancer–work interface experiences of breast cancer survivors employed in low-wage jobs enables us to address how employers, oncology providers, social workers, and patient navigators can increase the likelihood that these at-risk patients both receive appropriate clinical care and keep the jobs that provide them with economic security, a sense of self and, in many cases, access to health insurance. Thus, this study seeks to enhance knowledge about the cancer–work interface among breast cancer survivors employed in low-wage hourly jobs with the following aims: (1) to identify the employment decisions of low-wage breast cancer survivors and the factors that influenced or enabled these decisions; and (2) to identify the individual strategies and workplace supports used by low-wage breast cancer survivors, *who continued to work throughout their cancer care*, to manage the cancer–work interface.

---

<sup>3</sup>See footnote number 1 on page 2.

## Method

### Recruitment and sample

This exploratory qualitative study recruited 24 breast cancer survivors between June 2012 and August 2012 who were employed in Kentucky. To be eligible for study participation, a woman had to meet the following criteria: (1) received a new, primary breast cancer diagnosis within the last three years, (2) be employed at least 30 hours a week at one or more jobs at the time of diagnosis, (3) be earning less than \$15 per hour at the time of diagnosis<sup>4</sup>, and (4) between 18–65 years old. The study used a community-based, purposive sample. Passive recruitment approaches included newspaper articles, word of mouth, and distribution of flyers in medical oncology offices, public health clinics, grocery stores, and cancer support groups throughout the state. In addition, breast cancer survivors who received services from a regional nonprofit cancer advocacy organization serving un- or underinsured, low-income clients in the past three years were actively recruited through an invitation letter from the organization's director. Flyers and letters instructed prospective participants to call a designated phone number to inquire about study participation. Participants were screened for eligibility during the initial call by a research assistant; eligible participants were scheduled for a 1-hour telephone interview to take place the following week.

Our sample size of 24 was based on theoretical sampling (Glaser, 1992), in which we aimed to recruit several participants who were likely to represent a range of experiences and insights pertaining to the management of the cancer–work interface among breast cancer survivors employed in low-wage jobs. The original research design called for recruitment of up to 25 women or until interviews reached a qualitative saturation of information. Recruitment of this study sample proved challenging despite extensive recruitment strategies implemented throughout a statewide network of nonprofit and medical organizations. This difficulty in recruitment may have been due to the economic, health, and employment conditions of these women making them “hard to reach.” Nonetheless, we recruited a sample size that yielded saturation of information about how breast cancer survivors in low-wage jobs managed the cancer–work interface.

### Data collection

After a woman was reached by telephone to begin her interview, informed consent was obtained verbally, and permission to record and take handwritten notes was requested. Prior to administering the in-depth interview guide, participants were asked to answer a brief questionnaire about their sociodemographic, employment, and cancer characteristics.

The in-depth interview followed a semistructured format, asking questions that explored women's employment decision-making processes, individual and workplace strategies used

---

<sup>4</sup>We classified low-wage using the social inclusion perspective (Boushey et al., 2007), which specifies that a low-wage job is one paying less than two-thirds the median wage for men, which was approximately \$14.50 per hour in 2012 when the study was completed (BLS, 2012). For ease of recruitment, we rounded up and defined low-wage as less than \$15.00 per hour, which also coincides with the Living Wage Movement's definition of lower-wage jobs (Fight for \$15, 2016; Tung, Son, & Lathrup, 2015). This figure is comparable to approximately 135% of the US poverty line for a family of four in 2012 when the study was conducted (US DHHS, 2012).

to manage the cancer–work interface, challenges encountered while continuing to work or upon return to work, employer-sponsored benefits or practices that influenced employment experiences during or after treatment, and other workplace factors that influenced employment experienced during or after treatment. All interviews were audio recorded and professionally transcribed, except in two cases where copious notes were taken during the interview (i.e., audio-recorder malfunction and one woman’s request not to record the interview). Interviews ranged in length from 45 to 90 minutes. Women were compensated \$30 for study participation. All study procedures were approved by the Office of Research Integrity at the last author’s university.

### Data analysis strategy

Transcribed recordings, along with the handwritten notes for the two cases noted in the previous section, were uploaded to ATLAS.ti (Version 7), a qualitative software program used to manage transcripts and generate codes. This study used a constant comparative method to analyze the data (Lindlof & Taylor, 2002; Schoenberg, Hatcher, & Dignan, 2008; Corbin & Strauss, 2008). Four coders, including the first and last authors, read the transcripts line-by-line and generated initial codes through code notes and analytic memos. All four coders then met to discuss these initial findings and develop more comprehensive categories; this led to the development of a codebook. Two coders then returned to five of the transcripts and coded them using the generated codebook; there was nearly 95% agreement between the two coders. To strengthen inter-rater reliability, four coders discussed the areas that generated most discrepancy, until there was 100% agreement. This process continued until all 24 interviews were coded. All coders met repeatedly to discuss the findings to resolve any discrepancies and come to consensus about coding and interpretations of data. Several additional steps were taken to ensure rigor in the data analysis. First, the research team members were selected from three different disciplines (i.e., social work, public health, and cancer control), allowing for multiple perspectives during coding and interpretation of the data. All research team members had previous research experience working with cancer survivors in Kentucky, and one author had extensive experience working with the employment community in Kentucky; this allowed the researchers to evaluate the findings based on their past field experiences. To further ensure internal validity, findings were corroborated and refined through the use of an informal advisory council; this team consisted of oncologists, oncology nurses, cancer advocacy organization leaders, a clinical psychologist, and academic researchers. In conclusion, researchers determined that saturation regarding employment decisions was reached with these 24 participants; these women voiced strikingly similar perspectives on this topic. Saturation was evidenced by these consistent findings pertaining to employment decisions and factors that influenced these decisions such that interviews continued until there was no additional new information derived from participants on these specific topics and further coding was no longer possible (Guest, Bunce, & Johnson, 2006). All 24 participants were included in the analysis to answer the study’s first aim; we restricted the reporting of our analysis to the 13 women, who continued to work during treatment to answer Aim 2.

## Results

### Sample characteristics

As presented in Table 1, the majority of women in this sample were White (91.7%) and their average age was 49.3 years ( $SD = 8.5$ ). Almost 60% of the women had at least some college education; eight women earned their high school diploma/GED (33.3%), and two women (8.4%) did not complete high school. Half of the sample was married/partnered and 29.2% of the women had children under the age of 18. Most women reported that they discovered their breast cancer through self-detection (58.3%) or mammogram (25%), and the average age at diagnosis was 47.4 years ( $SD = 8.7$ ). The majority were diagnosed with Stage I or II breast cancer (I = 29.2%; II = 33.3%) and at the time of interview, just over 60% had completed treatment.

Approximately, half of the sample was employed in retail (29.2%) or healthcare/social assistance (20.8%) industries. Three-quarters of the women had health insurance through their employer or their spouse's employer. At the time of diagnosis, the average hourly wage was \$11.25 ( $SD = \$2.18$ ). Table 2 provides a detailed description of selected individual and employment characteristics of the 24 women in this sample.

### Employment during and after cancer treatment

Four primary employment decisions were identified among the sample of 24 breast cancer survivors, which are reported in Table 3. A total of 13 women (54%) continued working throughout their cancer care, six women (25%) returned to work after an extended leave taken for treatment and recovery, four women (17%) quit working immediately or almost immediately following diagnosis, and one woman (4%) was still on extended medical leave at the time of the interview. Table 3 describes the common reasons, both broadly and in detail, which influenced or enabled women's employment decisions. Although we define and describe these reasons individually, women commonly reported multiple reasons for why they made certain employment decisions.

**Continued to work**—Women who continued to work during their cancer care and recovery are defined as those who took minimal or intermittent<sup>5</sup> time off for medical appointments, treatment, and recovery. Women reported two primary factors that influenced their decision to continue to work throughout their cancer care: financial necessity and sense of responsibility.

**Financial necessity:** The most common reason that influenced survivors to continue to work throughout their treatment and recovery was financial necessity. This theme included topics such as a fear of job loss, the need for employer-sponsored health insurance<sup>6</sup>, the need for income, and limited or no access to paid time off from work. Women who reported a *fear of losing their job* believed that if they took any length of time off to focus on their cancer care,

<sup>5</sup>Intermittent leave is defined as leave taken in separate periods of time due to a single illness or injury, rather than for one continuous period of time, and may include leave periods from an hour or more to several weeks (Intermittent Leave or Reduced Leave Schedule, 2015).

<sup>6</sup>This study was conducted before widespread implementation of the Affordable Care Act.



they would lose their job. Implicit in this fear was the concern that their employer might terminate them because of their cancer diagnosis. Job loss would mean loss of income and, in some cases, *loss of employer-sponsored health insurance*, neither of which could the women or their families afford, as illustrated by a woman who was undergoing chemotherapy treatment:

I ended up just [working] third shift and I worked 4 nights a week which is like 11:00 o'clock at night until about 9:00 in the morning... I just, I knew that I had to; otherwise, I wouldn't have health insurance and I would essentially lose everything and go bankrupt if I didn't do that so that's a good motivating factor [Participant 13].

Women *needed the income that their job provided*. Without this income, women would be unable to "pay the bills." Financial insecurity, or living paycheck-to-paycheck, seemed to be an underlying cause of women's belief that they did not have a choice to stop working, as illustrated by a woman employed as retail clerk:

I had to work. My husband was unemployed, [he] had lost his job.... So we had to have my income.... I had to get up and go to work regardless of how I felt physically or emotionally every day...I was blessed in that I didn't miss any work; I went to work every day. The only time I was not at work was if I had to leave early for my chemo appointment or my radiation appointment. If I had tests or doctors' appointments that were going to require [time off], I would schedule those on my day off, but I never called in [Participant 14].

*Limited or no access to paid leave* was another reason women believed it was financially necessary to keep working during their cancer treatment. Among the 13 women who continued to work during treatment, ten women had either no access ( $n = 5$ ) or limited access (fewer than 5 paid days per year) ( $n = 5$ ) to employer-provided paid leave; two women exhausted their annual 3 weeks of vacation time for treatment and related medical appointments; and one woman who did not have paid leave when she was first diagnosed changed jobs within her same company to gain access to paid leave. One woman had just started a new job as a receptionist at a factory when she found out she had breast cancer: "I just haven't been there long enough yet [to have access to paid time off] ...I was never denied time off due to my illness but it was just not paid [Participant 8]."

**Sense of responsibility:** Five women reported that they continued to work due to a sense of responsibility. This reason included topics such as the normalcy provided by going to work, feeling needed at work, and feeling that going to work represented being healthy. One woman stated, "sitting at home with nothing to do is not going to make me feel better; coming to work, getting up every day with a sense of purpose makes me feel better...it makes me tired but it makes me feel better you know [Participant 14]."

**Returned to work—**For this analysis, we categorized women's employment decision as *returned to work* if they had taken leave from work for a continuous number of weeks for cancer treatment and recovery and returned to the same or comparable job at the same place where they were employed at diagnosis. Four primary reasons were identified that enabled

or influenced women to return to work after taking an extended leave. Having access to *short- and long-term disability, a combination of various forms of paid leave, and other workplace supports* was critical to taking leave and returning to work when appropriate. *Financial necessity* was a primary factor that influenced women's decision to return to work.

**Short- and long-term disability:** One woman said that her employer, "pay[s] for our disability insurance after you've been employed there...for a year...there would've been no way I could've made it without having that little bit of income coming in for those 6 months that I was off [Participant 7]." Another woman took time off from work for 9 months after her surgery, which required her to use short-term and long-term disability; when asked if 9 months was enough time off work postsurgery, the woman responded that she wished she had had one more week [Participant 12]. As another woman said, "... I was one of the lucky ones; I had added short-term and long-term disability to my benefits" [Participant 19].

**Combined forms of paid leave:** Women who combined forms of paid leave benefits to take time off from work for cancer treatment and recovery cobbled together benefits including: paid sick leave, paid vacation, sick leave banks (days donated by coworkers), paid personal days, paid emergency leave, and disability insurance. Here, one woman expressed gratitude to her coworkers and illustrates how important access to paid leave was to her treatment and recovery:

I'm very fortunate; we have the sick bank. When I first was diagnosed...it took up all my sick days, my personal days, and emergency days. And so then [I] had to go into the sick bank. Thankfully, there's other people that work with me, coworkers that donated sick days. If it wasn't for that, I don't know what I would've done [Participant 10].

**Use of other forms of workplace supports:** The *use of other workplace supports* to aid the transition back to work included: supervisor support, coworker support, flexible work arrangements, gradual return to work, and physical job modifications. One woman described her return to work as challenging, given the physical nature of her warehouse job that required moving boxes. However, the emotional support from her supervisor and the instrumental support from her coworker made the return to work easier:

I really couldn't say anything negative because he's [supervisor] just supported me all the way... .... I had to kind of watch and limit myself as far as lifting and that kind of stuff because of my arm you know where all the lymph nodes was took out...he [coworker] won't let me lift anything, even if it's something that I can lift [Participant 16].

**Financial necessity:** Financial necessity was a common reason that influenced women's return to work after completing and recovering from treatment. Of the seven women who returned to work, five reported an annual income of less than \$25,000. One woman simply stated "...the bills don't stop coming just because you're sick [Participant 21]." Another woman noted that although she had access to short-term disability insurance and was covered under Family Medical Leave Act, the reduction in pay while she was out of work created financial strain:



Our facility offers short-term disability which is not going to pay hardly anything; I mean it pays \$200 a week. I know when I get that check, I'm going to have to turn around and give it right back to my employer to pay my health insurance because we have to pay that while we're off work. And even though they're offering me a medical leave of absence to hold my position, there is no sick time, you know there's no other money coming in other than what my husband brings in and we've grown to rely on my paycheck. What stresses me out more than anything is just worrying about how we're going to pay our bills [Participant 20].

**Stopped working**—Four women stopped working at the time they were diagnosed with breast cancer or within a few weeks of diagnosis and were unattached to the labor force at the time of the interview. A *lack of employer benefits* was a factor that influenced one woman to quit her job as a gas station attendant upon learning she had cancer. She knew, “there was no chance to get off for anything, so I just went ahead and quit [Participant 18].” *Inability to work* was another reason women stopped working, such as one woman who closed her business because she did not have anyone to take over for her (Participant 1), and another woman who could no longer perform her physical tasks as a hotel housekeeper (Participant 21). Yet another woman employed as a baker had to stop working because of the severity of her Stage IV breast cancer condition (Participant 23). The following quote describes an accident at work that led her to her cancer diagnosis:

I was at work and I fell. I thought I slipped on something. I went to the nurse's station to check my leg out, took some aspirin, went back to work and my leg was still hurting. After work, I went to the emergency [room], they did some x-rays and told me they was going to put me in the hospital. I'm like, is my leg broke? And they [said] no. I'm like, well I'm not staying in the hospital; I gotta go to work tomorrow. They said, no, we really have to put you in the hospital. .... the doctor told me the reason that I fell was because my hip was fractured and that was because the [breast] cancer had spread into my bones [Participant 23].

All four women who stopped working required some form of *financial assistance*; they relied on friends and family, Medicaid, food banks, and/or disability coverage to survive financially.

**Long-term medical leave**—One woman, a 45-year-old cabinet maker, was on long-term medical leave at the time of the interview due to *serious health problems*; specifically, limited range of motion due to a skin graft that did not heal properly. Here she describes why she was on leave, “...with the incisions and the stitches, the heavy lifting would bust those out and I didn't have the movement free of pain you know; it was very hurtful to even move” [Participant 24].

### Primary cancer–work interface strategies

Among the 13 participants who *continued to work*, there were two main types of strategies that were utilized to manage the cancer–work interface as shown in Table 4: individual- and workplace-level strategies. Individual strategies were approaches used by women to coordinate cancer care within the context of work, whereas workplace-level strategies

involved the utilization of formal and informal workplace supports. Once more, although we describe individual- and workplace-level strategies separately, women often used a combination of these described strategies to manage the cancer–work interface.

**Individual strategies**—The first individual strategy theme was *planning medical/treatment appointments around their work schedule*, which worked particularly well for one woman who worked an overnight schedule, “...it worked good for treatment because you know I’d get off work and I’d go to treatment...I didn’t have to miss work” [Participant 11].

A second theme was reported by women who *realized their symptom pattern and planned for work accordingly*. For example, one woman planned chemotherapy for the afternoon before her day off, allowing her to recuperate before going back to work [Participant 13]. Another woman planned her chemotherapy appointment for Tuesdays knowing that by the weekend she would need to rest, stating:

We work Saturdays and Sundays. They [offered] me Saturdays and Sundays off because I had my treatment on Tuesday [and] by the third day [after my treatment], that’s when I started getting sick. I’d get the nausea, the pain, the fever and I’d just stay home....I [would] have the weekend off [Participant 9].

Some women reported they were able to *modify their work schedule to attend medical appointments* by taking advantage of extended lunch hours, coming in early and/or working late to make up for time taken off to attend medical appointments, and changing work shifts. This strategy allowed participants to take time off from work to attend their medical appointments without having to lose pay or use vacation and/or sick time. As an example, on the days that one woman, who worked 35–45 hours per week as a bookkeeper for a construction company, had her chemotherapy appointments she would arrive to work at 6:00 am, take a break for treatment, and then return to work until 5:00 pm or until her work was complete [Participant 3]. This strategy prevented her from losing her weekly income.

The fourth individual strategy theme in managing cancer and work was to *work through treatment with minimal time off*. Participants who used this strategy did so because they had limited or no access to paid time off, wanted to show commitment to their employer, had financial pressures, and/or wanted to maintain a sense of normalcy. One participant who took time off only when absolutely necessary said:

...I could’ve taken off work, I could’ve taken short-term disability but I didn’t. I think I needed to be out in the public though; it made me move. I took off right after my surgery for two days and that was it. That was after the surgery before I even knew I had to have chemo. The surgery would’ve been nothing; the chemo is what was the killer. Radiation was nothing [Participant 5].

**Workplace-level strategies**—The first workplace strategy theme was *flexible work hours*, including the modification of one’s routine schedule, being able to use daily flextime as needed, reducing work hours, and being able to work from home. One woman reported that working from home was particularly important, “that helped me be able to manage through it because I still worked every day and I even worked through my chemo”

[Participant 5]. Another woman reduced her work hours by one hour per day for six weeks for her radiation treatment [Participant 6]. For several women, flexible work hours were formally arranged, as illustrated in the previous case illustration and informally arranged as negotiated with supervisors on a day-by-day or week-by-week as needed basis.

Women who reported the second theme of *job task modification* by their employer included strategies such as being assigned less physically demanding work, temporarily switching job roles, being given more time to complete tasks, and being permitted to take intermittent breaks. Modification of job tasks—as supported by a healthcare provider—allowed women to keep working as illustrated by this youth counselor, “when I was doing chemo, I got to the point where I realized that I couldn’t do a whole bunch of heavy lifting stuff and.... so my doctor wrote a note for me to just do sedentary stuff” [Participant 13].

Another theme was *senior management and supervisor support*, which was evidenced by assurances of job security, assisting in the creation of patchwork benefit combinations to ensure paid time off was available, approval of schedule change requests, and/or the accommodation of rest breaks. Supervisor support was particularly important to women who lacked paid time off. In some instances, supervisors and senior management would make accommodations to ensure a woman’s financial or job security. For example, one small business owner provided an additional nine days of paid time off to a woman who had used up her three days of annual sick leave [Participant 3]. In another case, a woman’s supervisor encouraged her to take naps during the work day as needed and to modify her work load according to her postchemotherapy physical stamina [Participant 8]. This woman continued to work during her treatment because, as a recently hired employee, she did not have access to any form of paid leave.

Last, *workplace policies and practices* reported as strategies used in managing cancer and work included paid time off (e.g., vacation and sick leave) and excess paid time off accessibility when regular paid time off was exhausted. Paid time off allowed women to take intermittent leave for medical appointments, treatment, and to rest as characterized by one woman who said, “...at the time of the surgery I think I was off for about 4 days on sick leave and then once the radiation started, I was, I guess I took an hour off every day for radiation treatment” [Participant 6].

## Discussion

This qualitative study broadens the research knowledge base about the experiences of employed breast cancer survivors by focusing specifically on those employed in low-wage jobs. Specifically, this study aimed to identify the employment decisions of low-wage breast cancer survivors throughout their cancer care and to explicitly understand the strategies used by women who continued to work during treatment to manage the cancer–work interface.

Three important findings emerged from this study. First, slightly more than half the women in this study continued to work during treatment. Lack of or limited access to any type of paid leave influenced women’s decisions to keep working. Many of these women could not afford to take time off from work to focus solely on their cancer care. Instead, they

developed an array of individual strategies to “fit” their cancer treatment within the context of their work responsibilities, accessing formal and informal workplace supports to negotiate the concurrent demands of treatment and employment responsibilities.

Few studies—to the authors’ knowledge—have exclusively examined employment decisions of breast cancer survivors working in low-wage jobs and the strategies to co-manage work with their cancer care (e.g., Vanderpool et al., 2013). As illustrated in this study, low-wage earning breast cancer survivors frequently continued to work throughout their treatment out of financial necessity. These women planned medical appointments around their work schedule, modified work schedules to accommodate their treatment schedule, worked through treatment while taking minimal time off, and many became attuned to their body’s response to chemotherapy and radiation, modifying their work schedule accordingly. Without or with limited paid time off, employment commitments were equally as important to women as their cancer treatment. As such, the combination of low wages and lack of access to workplace supports required that many of these women continue to work during treatment.

Access to employer-sponsored health insurance was another reason that influenced women to continue to work during their treatment and cancer care. Many of the participants feared that if they took time off, they would jeopardize their job and subsequently their health insurance coverage. Furthermore, although several workers had insurance through their employer or spouse, the financial burden associated with cancer care, in the form of high insurance deductibles and medical and office copayments, was perceived as significant by these women. Even with the passage of the Affordable Care Act (ACA) in 2012, survivors in low-wage hourly jobs may still face serious challenges if they lose their employer-sponsored health insurance. The most notable coverage provision of ACA for low-income individuals, who often cannot afford health insurance premiums, was expanded access to Medicaid which Kentucky adopted in 2014.

However, the authors posit that even if study respondents who lost their employer-sponsored health insurance were eligible for Medicaid coverage, this does not mean they would necessarily receive the same health services or pay the same fees. Indeed, access to high-quality care remains difficult for many cancer patients covered by Medicaid. The reimbursement rates offered by Medicaid are lower than those paid by private insurance or Medicare (Tozzi, 2014); therefore, fewer specialists are accepting Medicaid (Kaiser Family Foundation [KFF], 2013), increasing the demand on the remaining providers and creating barriers to care for patients such as longer waiting times for appointments and other scheduling delays. Additionally, national data show that patients covered by Medicaid are less likely to receive standard cancer diagnostics (Thompson, 2014) or cancer treatments (Thompson, 2014; Walker et al., 2014). Especially for our respondents, a change in health insurance might have triggered a change in healthcare providers and/or treatment options and survivorship care, as not all doctors choose to accept Medicaid or other health insurance plans. Given these considerations, we expect that study respondents would have had similar concerns post-ACA implementation as they reported when this study was conducted. From a national perspective, 19 states opted out of Medicaid expansion leaving a significant gap

(KFF, 2016) that may leave women similar to our study population even more vulnerable if they were to lose their employer-sponsored health insurance.

A second important finding from this study is the role played by informal workplace supports in breast cancer survivors' management of the cancer–work interface. Most cancer and work studies identify formal workplace policies (e.g., paid leave, short-term disability) as instrumental to survivors' treatment and return to work (Nitkin et al., 2011; Taskila & Lindbohm, 2007). In this study, although access to and utilization of formal supports enabled survivors' to return to work after taking leave, lack of formal workplace supports partially contributed to survivors' need to continue working during treatment. In fact, for women without access to formal workplace supports, informal supports—such as a supervisor negotiating schedules, supervisors offering flexible work hours and intermittent break times, and/or coworkers donating sick leave or assisting with physical work tasks—were essential to facilitating continued work during treatment.

These informal workplace supports provided a “social safety net” that was unavailable without formal workplace supports. In essence, these individualized arrangements facilitated women to “fit” their cancer care within the context of work responsibilities and workplace supports. The uniqueness of each person's cancer treatment plan and personal response requires a cancer–work interface strategy that adjusts to a survivor's changing needs. Access to informal workplace supports allowed survivors who continued or returned to work to adjust to the changing needs of their cancer experience.

A third important finding from this study is the illumination of the strategic approaches women developed to manage the cancer–work interface. Women used multiple individual and workplace-level strategies to ensure they could keep their jobs with minimal disruption. We term this phenomena “cancer-work fit”—the act of developing strategies that allow a breast cancer survivor to “fit” her cancer care with her job responsibilities in such a way that she is able to participate in cancer care and continue to meet job requirements and maintain employment. This term is an extension of the concept of work–life fit (Yost, 2004) which is the way that work “fits” into one's life, recognizing everyone has a unique set of work and life circumstances. Accordingly, achieving optimal work–life fit is accomplished through strategic action, which assumes that there is no right answer for one person on any given day. This definition parallels the experiences of the low-wage earning breast cancer survivors in this study. Achieving optimal cancer–work fit among the women in this study was accomplished through tactical planning. Even under intense financial strain, women developed individual strategies that ensured they received their treatment, while sometimes garnering the support of supervisors and coworkers, modifying work schedules, and/or utilizing formal workplace supports.

### Limitations and implications

This study has several limitations that should be considered when interpreting its results. First, due to its small sample size, convenience sampling, and qualitative methodology, the results are not generalizable to all breast cancer survivors employed in low-wage jobs. Rather, our findings provide an exemplar of the context and experiences of breast cancer survivors employed in low-wage jobs in managing the cancer–work interface. Second,

although we tried to recruit a racial and ethnically diverse sample, the demographics of the state in which this study was conducted made it difficult to recruit said participants into our study. Third, given that our data was self-reported, it is possible that the information provided is not a complete representation of the experiences of breast cancer survivors employed in low-wage jobs in managing the cancer–work interface.

Although there is an expanding body of literature on the effects of breast cancer on women's employment, return to work is the primary outcome of interest in most studies of employed cancer survivors (Feuerstein et al., 2010; Nitkin et al., 2011). Few studies have examined the prevalence of and reasons for cancer survivors "continuing to work" during treatment (Sandberg et al., 2014). Moreover, to the authors' knowledge, no research has examined individual and organizational factors associated with, or barriers to, continuing to work during breast cancer treatment, particularly in a low-wage employment environment. This is an overlooked area of research, especially given the widening inequality and economic insecurity among US workers (U.S. Government Accountability Office, 2015; Hacker et al., 2012) that may require more breast cancer survivors continue to work during treatment.

This study provides valuable information for practitioners (e.g., social workers, cancer patient navigators, nurses, physicians) working with women employed in low-wage jobs who have been diagnosed with breast cancer and/or are currently undergoing treatment. This is particularly relevant given research indicating that cancer care providers feel limited in their ability to address work-related topics with their patients (Bains, Yarker, Amir, Wynn, & Munir, 2012). Gaining a better understanding of the strategies used by women who are diagnosed with cancer and employed in low-wage jobs to manage the cancer–work interface gives insight into potential areas where practitioners can aid in this process. For example, by ensuring that patients are given extensive counseling on what side effects to expect from treatment, women who work during treatment may be able to more effectively schedule their treatments and work hours and/or ask for workplace accommodations or flextime opportunities from their supervisors. Also, oncology practitioners could collect best practices from women who are concurrently managing treatment and work to share with other patients.

Future research is needed to identify the prevalence of breast cancer survivors who continue to work during treatment and reasons for doing so, as well as, the individual and organizational factors that support or hinder women to continue to work during treatment. Moreover, research is needed to understand the interaction between these factors, their influence on women's treatment and employment decisions, and the tactics and strategies that women use to negotiate the concurrent demands of cancer treatment and employment. Finally, research should examine how these issues may vary across the socioeconomic spectrum. A prospective, longitudinal assessment of breast cancer and employment issues among low and higher wage workers would provide greater depth into understanding the cancer–work fit strategies used by women earning different wages and how employment context may impact the selection and implementation of such strategies. Understanding the "work" aspect of the cancer–work interface will only provide a partial picture of women's cancer–work fit experiences. Future research is also needed to understand what type of information and recommendations oncology teams provide cancer survivors about



employment and to assess supervisors and managers' knowledge of cancer, its effect on employment, and ways to accommodate survivors in the workplace.

This is one of the first studies of the experiences of breast cancer survivors employed in low-wage jobs in managing the cancer–work interface. Findings suggest that more than half survivors continued to work during treatment, while others returned to work after an extended leave, or resigned from a job and applied for unemployment or disability assistance. Survivors utilized a variety of different individual strategies and workplace supports to negotiate the job responsibilities with their cancer care. Future research is needed to systematically understand how employment context may influence the strategies that breast cancer survivors engaged in low-wage work use to manage the cancer–work interface and whether these strategies differ from those used by higher wage earning survivors.

## Acknowledgments

We are grateful to the breast cancer survivors who participated in this study. We would also like to thank Mary K. Webster, Nick R. Coomer, and Lisa G. Williams for their assistance with participant recruitment and conducting participant interviews.

### Funding

This paper was supported by the University of Kentucky Institute for Workplace Innovation (iwin) and by Cooperative Agreement Number 1U48DP001932-01 from the Centers for Disease Control and Prevention (CDC). The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of iwin or the CDC.

## References

- Ahles TA, Saykin AJ, McDonald BC, Furstenberg CT, Cole BF, Hanscom BS, Mulrooney TJ, Schwartz GN, Kaufman PA. Cognitive function in breast cancer patients prior to adjuvant treatment. *Breast Cancer Research and Treatment*. 2008; 110(1):143–152. DOI: 10.1007/s10549-007-9686-5 [PubMed: 17674194]
- American Cancer Society (ACS). *Cancer Facts & Figures*. Vol. 2016. Atlanta: American Cancer Society; 2016.
- Bains M, Yarker J, Amir Z, Wynn P, Munir F. Helping cancer survivors return to work: What providers tell us about the challenges in assisting cancer patients with work questions. *Journal of Occupational Rehabilitation*. 2012; 22:71–77. [PubMed: 21870065]
- Balak F, Roelen CA, Koopmans PC, Ten Berge EE, Groothoff JW. Return to work after early-stage breast cancer: A cohort study into the effects of treatment and cancer-related symptoms. *Journal of Occupational Rehabilitation*. 2008; 18(3):267–272. [PubMed: 18670868]
- Boushey, H., Fremstad, S., Gregg, S., Waller, M. *Understanding low-wage work in the United States*. Washington, DC: Center for Economic Policy and Research; 2007.
- Bureau of Labor Statistics. Weekly earnings of full-time workers by age and sex, second quarter 2012. 2012. Retrieved from [http://www.bls.gov/opub/ted/2012/ted\\_20120720.htm](http://www.bls.gov/opub/ted/2012/ted_20120720.htm)
- Bureau of Labor Statistics. Employee benefits in the United States- March 2015. 2015a. Retrieved from <http://www.bls.gov/news.release/pdf/ebs2.pdf>
- Bureau of Labor Statistics. A look at the pay at the top, the bottom, and in between. 2015b. Retrieved from <http://www.bls.gov/spotlight/2015/a-look-at-pay-at-the-top-the-bottom-and-in-between/home.htm>
- Corbin, J., Strauss, A. *Basics of qualitative research*. 3. Thousand Oaks, CA: Sage; 2008.
- DeSantis CE, Lin CC, Mariotto AB, Siegel RL, Stein KD, Kramer JL, Alteri R, Robbins AS, Jemal A. Cancer treatment and survivorship statistics, 2014. *CA: A Cancer Journal for Clinicians*. 2014; 64:252–271. DOI: 10.3322/caac.21235 [PubMed: 24890451]

- Enchautegui, M. Nonstandard work schedules and the well-being of low-income families. 2013. Retrieved from <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412877-Nonstandard-Work-Schedules-and-the-Well-being-of-Low-Income-Families.PDF>
- Farrell, J., Venator, J. Paid sick days work for U.S. employees and employers. Center for American Progress; 2012. Retrieved from [https://cdn.americanprogress.org/wp-content/uploads/issues/2012/08/pdf/paidsickdays\\_factsheet.pdf](https://cdn.americanprogress.org/wp-content/uploads/issues/2012/08/pdf/paidsickdays_factsheet.pdf)
- Feuerstein, M., editor. Work and cancer survivors. New York, NY: Springer Science; 2009.
- Feuerstein M, Todd BL, Moskowitz MC, Bruns GL, Stoler MR, Nassif T, Yu X. Work in cancer survivors: A model for practice and research. *Journal of Cancer Survivorship*. 2010; 4(4):415–437. DOI: 10.1007/s11764-010-0154-6 [PubMed: 20945110]
- Fight for \$15. Fight for \$15. 2016. Retrieved from [www.fightfor15.org](http://www.fightfor15.org)
- Glaser, B. Basics of grounded theory analysis. Mill Valley, CA: Sociology Press; 1992.
- Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. *Field Methods*. 2006; 18(1):59–82. DOI: 10.1177/1525822X05279903
- Hacker, JS., Huber, G., Nichols, A., Rehm, P., Schlesinger, M., Valletta, RG., Craig, S. The economic security index: A new measure for research and policy analysis. Bonn, Germany: IZA; 2012. (Discussion Paper No. 6946).
- Hammer LB, Kossek EE, Anger T, Bodner T, Zimmerman KL. Clarifying work-family intervention processes: The roles of work-family conflict and family supportive supervisor behaviors. *Journal of Applied Psychology*. 2011; 96(1):134–150. [PubMed: 20853943]
- Henly J, Shaefer HL, Waxman E. Nonstandard work schedules: Employer- and employee- driven flexibility in retail jobs. *Social Service Review*. 2006; 80:609–634. DOI: 10.1086/508478
- Hsia J, Kemper E, Kiefe C, Zapka J, Sofaer S, Pettinger M, Bowen D, Limacher M, Lillington L, Mason E. The importance of health insurance as a determinant of cancer screening: Evidence from the women's health initiative. *Preventive Medicine*. 2000; 31(3):261–270. [PubMed: 10964640]
- Hsueh J, Yoshikawa H. Working nonstandard schedules and variable shifts in low-income families: Associations with parental psychological well-being, family functioning, and child well-being. *Developmental Psychology*. 2007; 43:620–632. DOI: 10.1037/0012-1649.43.3.620 [PubMed: 17484575]
- Intermittent Leave or Reduced Leave Schedule. 2015; 29 CFR 825.202.
- Kaiser Family Foundation. What is medicaid's impact on access to care, health outcomes, and quality of care? Setting the record straight on the evidence. 2013 Aug. Retrieved from <http://kff.org/report-section/what-is-medicaids-impact-on-access-to-care-health-outcomes-and-quality-of-care-setting-the-record-straight-on-the-evidence-issue-brief/>
- Kaiser Family Foundation. The coverage gap: Uninsured poor adults in states that do not expand medicaid – An update. 2016. Retrieved from <http://kff.org/health-reform/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicare-an-update/>
- Kalleberg A, Reskin B, Hudson K. Bad jobs in America: Standard and nonstandard employment relations and job quality in the United States. *American Sociological Review*. 2000; 65(2):256–278.
- Kelly EL, Moen P, Oakes JM, Fan W, Okechukwu C, Davis KD, Hammer LB, Kossek EE, King RB, Hanson GC, Mierzwa F, Casper LM. Changing work and work-family conflict: Evidence from the work, family, and health network. *American Sociological Review*. 2014; :1–32. DOI: 10.1177/0003122414531435
- Lambert S, Haley-Locke A, Henley J. Schedule flexibility in hourly jobs: unanticipated consequences and promising directions. *Community, Work & Family*. 2012; 15:293–315.
- Lindlof, TR., Taylor, BC. Qualitative communication research methods. 2. Thousand Oaks, CA: Sage; 2002.
- Main DS, Nowels CT, Cavender TA, Etschmaier M, Steiner JF. A qualitative study of work and work return in cancer survivors. *Psycho-Oncology*. 2005; 14(11):992–1004. DOI: 10.1002/pon.913 [PubMed: 15744780]
- Mehnert A. Employment and work-related issues in cancer survivors. *Critical Reviews in Oncology/Hematology*. 2011; 77(2):109–130. [PubMed: 20117019]

- National Library of Medicine. National library of medicine - Medical subject headings: 2016 MeSh, MeSH descriptor data. 2016. Retrieved from [https://www.nlm.nih.gov/cgi/mesh/2016/MB\\_cgi?mode=&term=Return+to+Work&field=entry](https://www.nlm.nih.gov/cgi/mesh/2016/MB_cgi?mode=&term=Return+to+Work&field=entry)
- National Women's Law Center. Underpaid and overworked: Women in low-wage jobs. Washington, DC: Author; 2014.
- Nitkin, P., Parkinson, M., Schultz, IZ. Cancer and work: A Canadian perspective. 2011. Retrieved from <http://www.capo.ca/pdf/CancerandWork-ACanadianPerspective.pdf>
- Peipins LA, Soman A, Berkowitz Z, White MC. The lack of paid sick leave as a barrier to cancer screening and medical care-seeking: Results from the National Health Interview Survey. *BMC Public Health*. 2012; 12:512–520. DOI: 10.1186/1471-2458-12-520 [PubMed: 22776197]
- Pryce J, Munir F, Haslam C. Cancer survivorship and work: Symptoms, supervisor response, co-worker disclosure and work adjustment. *Journal of Occupational Rehabilitation*. 2007; 17:83–92. [PubMed: 17318459]
- Roberts, B., Povich, D., Mather, M. Low-income working families: the growing economic gap. 2013. Retrieved from [http://www.workingpoorfamilies.org/wp-content/uploads/2013/01/Winter-2012\\_2013-WPFP-Data-Brief.pdf](http://www.workingpoorfamilies.org/wp-content/uploads/2013/01/Winter-2012_2013-WPFP-Data-Brief.pdf)
- Sandberg JC, Strom C, Arcury TA. Strategies used by breast cancer survivors to address work-related limitations during and after treatment. *Womens Health Issues*. 2014; 24(2):197–204. DOI: 10.1016/j.whi.2013.12.007
- Schoenberg NE, Hatcher J, Dignan MB. Appalachian women's perceptions of their community's health threats. *Journal of Rural Health*. 2008 Winter;2008:75–83.
- Stewart A, Bielajew C, Collins B, Parkinson M, Tomiak E. A meta-analysis of the neuropsychological effects of adjuvant chemotherapy treatment in women treated for breast cancer. *The Clinical Neuropsychologist*. 2006; 20(1):76–89. DOI: 10.1080/138540491005875 [PubMed: 16410227]
- Swanberg J, James J, Werner M, McKechnie S. Workplace flexibility for hourly lower-wage employees: A strategic business practice within one national retail firm. *The Psychologist Manager Journal*. 2008; 11(1):5–29. DOI: 10.1080/10887150801963836
- Swanberg J, Watson E, Eastman M. Scheduling challenges among workers in low-wage hourly jobs: Similarities and differences among workers in standard and non-standard hour jobs. *Community, Work & Family*. 2014; 17(4):409–435. DOI: 10.1080/13668803.2014.931837
- Swanberg JE, McKechnie SP, Ojha MU, James JB. Schedule control, supervisor support and work engagement: A winning combination for workers in hourly jobs? *Journal of Vocational Behavior*. 2011; 79(3):613–624. DOI: 10.1016/j.jvb.2011.04.012
- Taskila T, Lindbohm ML. Factors affecting cancer survivors' employment and work ability. *Acta Oncologica*. 2007; 46:446–451. DOI: 10.1080/02851860701355048 [PubMed: 17497311]
- Thompson, D. Medicaid patients get worse cancer care, studies contend. *HealthDay*; 2014. Retrieved from <http://consumer.healthday.com/cancer-information-5/breast-cancer-news-94/medicaid-patients-get-worse-cancer-care-studiesshow-688451.html>
- Tozzi, J. Losing patience, and patients, with Medicaid. *Bloomberg Business-week*; 2014 Apr 10. Retrieved from <http://www.businessweek.com/articles/2014-04-10/doctors-shun-patients-who-pay-with-medicare>
- Tung, I., Sonn, PK., Lathrop, Y. The growing movement for \$ 15. 2015. Retrieved from <http://www.nelp.org/publication/growing-movement-15/>
- United States Department of Health and Human Services. 2012 Poverty guidelines, federal register notice. 2012. Retrieved from <https://aspe.hhs.gov/2012-poverty-guidelines-federal-register-notice>
- United States Department of Health and Human Services. U.S. federal poverty guidelines used to determine financial eligibility for certain federal programs. 2016. Retrieved from <https://aspe.hhs.gov/poverty-guidelines>
- United States Government Accountability Office. Contingent workforce: Size, characteristics, earnings, and benefits. 2015. (GAO-15-168R).
- Vanderpool RC, Swanberg JE, Chambers MD. A Narrative review of the confluence of breast cancer and low-wage employment and its impact on receipt of guideline-recommended treatment. *Global Advances in Health and Medicine*. 2013; 2:75–85. DOI: 10.7453/gahmj.2013.046

- Walker GV, Grant SR, Guadagnolo A, Hoffman KE, Smith BD, Koshy M, Allen PK, Mahmood U. Disparities in stage at diagnosis, treatment, and survival in non-elderly adult patients with cancer according to insurance status. *Journal of Clinical Oncology*. 2014; 32:3118–3125. DOI: 10.1200/JCO.2014.55.6258 [PubMed: 25092774]
- Watson L, Swanberg J. Flexible workplace solutions for low-wage hourly workers: A framework for a national conversation. *Labor & Employment Law Forum*. 2013; 3(3):380–437. Retrieved from <http://aualaborlawforum.org>.
- Williams, J., Boushey, H. The three faces of work-family conflict. 2010. Retrieved from <https://www.americanprogress.org/issues/labor/report/2010/01/25/7194/the-three-faces-of-work-family-conflict/>
- Yost, C. Work-life fit. New York, NY: Riverhead Books; 2004.

**Table 1**Socio-demographic, employment, and cancer diagnosis characteristics of sample ( $n = 24$ ).

Variable	<i>n</i> (%)
Highest level of education	
Less than high school	2 (8.4)
High school diploma/GED	8 (33.3)
Some college/associates	6 (25.0)
At least a college degree	8 (33.3)
Race	
White	22 (91.7)
Non-White	2 (8.3)
Marital status	
Not married/partnered	12 (50.0)
Married/partnered	12 (50.0)
Parental status	
At least 1 child < 18 years of age	7 (29.2)
No children < 18 years of age	17 (70.8)
Industry	
Food/hospitality	3 (12.5)
Healthcare/social assistance	5 (20.8)
Manufacturing	4 (16.7)
Retail	7 (29.2)
Other	5 (20.8)
Source of health insurance	
Employer/spouse employer	18 (75.0)
Self-insured	1 (4.2)
Medicaid	3 (12.5)
Access to paid leave	
Yes	16 (66.7)
No	8 (33.3)
Stage at diagnosis	
Stage I	7 (29.2)
Stage II	8 (33.3)
Stage III	0 (0.0)
Stage IV	3 (12.5)
Unknown	6 (25.0)
Cancer discovery method	
Mammogram	6 (25.0)
Breast self-exam	14 (58.3)
Exam and symptom(s)	4 (16.7)
Treatment status at time of interview	
Pretreatment	1 (4.2)

Variable	<i>n</i> (%)
In treatment	8 (33.3)
Completed treatment	15 (62.5)
	Mean (SD)
Age at diagnosis (years)	47.36 (8.69)
Number of people in household	2.21 (1.18)



**Table 2**Selected individual and employment characteristics of study participants ( $n = 24$ ).

ID	Age at interview (years)	Marital status	Occupation	Hourly wage (\$) at diagnosis	Employment decision
1	61	Divorced	Uniform store owner	8.33	Stopped working
2	59	Married	Cosmetic consultant	12.5	Continued
3	60	Divorced	Bookkeeper	11	Continued
4	58	Divorced	Bookkeeper	14.5	Continued
5	46	Married	Computer technician	13	Continued
6	52	Married	Computer repairwoman	14.91	Continued
7	56	Married	Medical receptionist	12	Returned
8	48	Divorced	Factory worker/receptionist	8.5	Continued
9	54	Divorced	Bank teller	12	Continued
10	55	Married	School cook	11.82	Returned
11	48	Single	Stock clerk	9.37	Continued
12	57	Divorced	Sales coordinator	13	Returned
13	29	Single	Residential youth counselor	10.65	Continued
14	46	Married	Retail office clerk	10.7	Continued
15	37	Divorced	Certified nursing assistant	11.35	Continued
16	44	Married	Warehouse worker	10.18	Returned
17	57	Divorced	Certified nursing assistant	11	Continued
18	40	Married	Gas station attendant	7.25	Stopped working
19	35	Soon to be married	Gas station assistant manager	9.98	Returned
20	44	Married	Nursing home activities director	14	Returned
21	53	Divorced	Hotel housekeeper	7.25	Stopped working
22	51	Married	Factory worker	14.65	Continued
23	46	Divorced	Baker	9.25	Stopped working
24	45	Married	Cabinet maker	10	Long-term medical leave
Mean (SD)	49.25 (8.47)			11.25 (2.18)	

**Table 3**

Reasons that influenced or enabled low-wage breast cancer survivors' employment decisions to continue working/return to work ( $n = 24$ ).

<b>Employment decision</b>	<b>Broad reasons that influenced or enabled decisions</b>	<b>Detailed reasons that influenced or enabled decision</b>
Continued to work		
Influenced by	Financial necessity	Fear of losing their job Fear of losing employer-sponsored health insurance Need for income from job Limited/no access to paid time off
Influenced by	Sense of responsibility	Need for normalcy provided by work Feeling needed at work Feeling that going to work represented health
Returned to work		
Enabled by	Use of short- and long-term disability	Able to use disability income to meet needs during leave
Enabled by	Use of combined paid time off	Access to a combination of paid time off enabled them to take extended leave including: sick leave, vacation, sick leave banks, personal days, and emergency leave as well as disability benefits
Enabled by	Use of other workplace supports	Access to supports enabled them to return to work after leave including: supervisor support, coworker support, flexible work arrangements, gradual return to work, and job modification
Influenced by	Financial necessity	Need for income from job
Stopped working		
Influenced by	Lack of employer benefits	No access to paid time off for treatment
Influenced by	Inability to work	Not able to perform usual work duties due to side effects No one to cover their work if they took time off Unable to work due to severity of illness
Enabled by	Financial assistance	Needed assistance from friends/family, Medicaid, food banks, and/or disability coverage to survive financially
Long-term Leave		
Influenced by	Serious health problems	Limited range of motion and/or advanced-stage cancer diagnosis

**Table 4**

Individual level and workplace level strategies used by low-wage breast cancer survivors, who continued to work throughout their cancer care, to manage the work–cancer interface ( $n = 13$ ).

Level	Broad strategy	Detailed strategy
Individual	Planned appointments around work schedule	Scheduled appointments on days off and/or times that they were already going to be off work
	Knew symptoms and planned work accordingly	Knew when fatigue and/or illness would occur post-treatment and would proactively plan when to work according to this pattern
	Modified work schedule to attend appointments	Extending lunch hour, changing shifts, and/or coming into work early/staying late to make up time
	Work through treatment with minimal time off	Planned when to take off and how to use paid time depending on hours scheduled that week, so that a minimum number paid hours were able to be worked each week
Workplace	Flexible work hours	Modified routine schedule, allowed daily flextime as needed, reduced work hours, and/or worked from home
	Job task modification	Assigned less physically demanding tasks, temporary switch of job roles, allowed more time to complete job tasks, and/or allowed to take intermittent breaks during work
	Senior management and supervisor support	Assurance of job security, assisted with combining paid time off to meet needs, approved schedule changes, and/or accommodated rest breaks when needed
	Workplace policies and procedures	Access to paid time off, health insurance, and/or additional time off when paid leave time had been exhausted